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UNIVERSITETSPARKEN 5
DK-2100 KØBENHAVN, DANMARK

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Hovedmøde sammen med Sektionen for Uorganisk Kemi

Fredag den 4. december 2009, kl. 15.30

Auditorium 8, H.C. Ørsted Institutet,
Universitetsparken 5, 2100 København Ø.

Type Zero Copper Proteins

Kyle M. Lancaster, PhD fellow.

Beckman Institute, California Institute of Technology, Pasadena,
California 91125, USA

Mononuclear copper sites in proteins are typically grouped into one of two classes. Type 1 or "blue copper" sites exhibit narrow parallel hyperfine splittings in their EPR, intense blue charge transfer absorption in the optical spectrum, and rapid electron transfer reactivity due to low reorganization energies. Type 2 copper sites are typically found in catalytic roles, and display spectroscopic characteristics typical of small tetragonal copper(II) complexes. We have engineered in *Pseudomonas aeruginosa* azurin, a type 1 copper protein, a new copper coordination structure that does not lend itself to either classification. These "type zero" copper sites have been characterized structurally in both oxidized and reduced forms. Electronic structure has been probed by a wide range of spectroscopic techniques, from X-ray absorption to paramagnetic NMR. Implications of "rack bonding" on electron transfer efficiency, Cu(II) electron relaxation, and oxygen coordination modes will be discussed.

Efter mødet er der spisning.

Af hensyn til bestillingen af mad bedes tilkendegivelse af deltagelse rettes til secretary@chemsoc.dk